Claims

1. Monoclonal antibodies against the epitope YPYDVPDYA which is derived from the haemagglutinin of the human influenza virus, or fragments thereof, wherein they have an affinity of > 10^8 M^{-1}.

2. Monoclonal antibodies as claimed in claim 1, wherein they have an affinity of 10^9 - 10^{10} M^{-1}.

3. Monoclonal antibodies as claimed in one of the claims 1 or 2, wherein they are produced by hybridomas which are obtained by fusing mouse P3x63-Ag8.653 myeloma cells with B lymphocytes from Lou/C rats where the Lou/C rats were immunized with a HA peptide.

4. Monoclonal antibodies as claimed in claim 3, wherein the immunization is carried out with a HA peptide coupled to keyhole limpet haemocyanin (KLH).

5. Monoclonal antibodies as claimed in one of the claims 1 to 4, wherein they are produced by the hybridoma R 3A12 deposited at the "Deutsche Sammlung für Mikroorganismen und Zellkulturen" under the No. DSM ACC2286 (08.10.1996).

6. Process for the production of monoclonal antibodies as claimed in one of the claims 1 to 5, wherein a HA peptide is synthesized and it is used to

immunize small mammals, the B lymphocytes are isolated from the spleen of the animals and fused with mouse P3x63-Ag8.653 myeloma cells, the clones that are formed which bind to a HA peptide and to a HA fusion protein are selected and the clones with a high affinity are selected from these and established as hybrid cell lines.

7. Process as claimed in claim 6, wherein the acetyl-**YPYDVPDYA**GSGSK (ε-biotinoyl) amide or biotinoyl-ε-Aca-SGSG**YPYDVPDYA** amide is used as the HA peptide.

8. Process as claimed in claim 6 or 7, wherein HA-tagged glutathione-S-transferase is used as the HA fusion protein.

9. Use of monoclonal antibodies as claimed in one of the claims 1 to 5, wherein they are used to detect and isolate native haemagglutinin of the human influenza virus, modified haemagglutinin or HA fusion proteins.